

REMARKS

Claim 21 and the Abstract have been objected to by the Office Action. The Applicant submits that the present amendment renders these objections moot.

Claims 1-26 are present in the application, and all of claims 1-26 have been rejected by the Office Action. Claims 1-6, 8-11, 12-14, and 16-19 are rejected as anticipated under 35 U.S.C. § 102(b) over Seymour. Claims 7, 15 and 20 are rejected as obvious under 35 U.S.C. § 103(a) over Seymour in view of Sandage. Claims 21-26 are rejected as obvious under 35 U.S.C. § 103(a) over Seymour.

The Applicant respectfully traverses these rejections. With respect to claim 1, the Applicant submits that Seymour is inapplicable to this claim. Claim 1 clearly claims a method for use within a system. Such a system is illustrated in, for example, Figures 1a, 1b, and 2 of the application. Such a system may use a bus, such as the Universal Serial Bus (USB) for coupling devices of the system together. Such a system would be suitable as one of the various systems coupled together by a LAN in Seymour.

As illustrated in Seymour, a single node of the network may include a monitor (41), printer (42), disk drive (43), and I/O module (44) along with multiple processors (24, 27) and other devices using a bus (40) for internal communication. See Seymour, Figure 2. Thus, Seymour is directed at a different problem (communication over a local area network connected to a group of systems) from the problem of the present application (recognition of changes on a bus of a single system). Communication over a local area network necessarily involves complexities beyond those of communication over a bus. For example, the local area network allows for implementation of the virtual machine illustrated in Figure 3 of Seymour, which in turn allows for complex interactions

between processors of various systems, their associated memory, and for multi-processing. (See Seymour, Figure 3, and col. 7, lines 22-34, The virtual machine "allows programs to be written as if they were going to be executed on a single processor" even though they are executed across multiple processors and systems.) The system of the present application clearly contemplates communication along a bus within a single system, for the purposes of determining what devices are present in that system. For at least these reasons, the teachings of Seymour with respect to LANs are inapplicable to the present invention and its communications along a bus.

With respect to the other rejections, the Applicant submits that a similar statement may be made for claims 8, 12 and 16, which are thus patentable over Seymour. With respect to claims 2-6, 9-11, 13, 14 and 17-19, these dependent claims depend from an allowable base claim, and are thus allowable. With respect to claims 7, 15 and 20, the Applicant understands this rejection to depend on the rejection of the base claim with respect to Seymour, and to thus be moot. Finally, with respect to claims 21-26, the Applicant understands this rejection to also depend on the rejection of claim 1, and thus to be moot.

With respect to the rejection of claims 21-26, the Applicant notes that the Office Action relies on Official Notice of various aspects of the invention, and requests that a reference be supplied to illustrate these aspects of the invention, for purposes of clarifying the rejection. Furthermore, the Applicant invites the Examiner to interview the Applicant's representative telephonically by contacting the undersigned at the telephone number below.

Condition for Allowance

Applicants submit that all rejections have been overcome and the present application is now in condition for allowance. If the Examiner has any questions or comments, the Applicants respectfully request that the Examiner contact the undersigned by telephone.

Charge Deposit Account

Please charge any shortages and credit any overages to Deposit Account No. 02-2666, including any funds necessitated due to insufficient funds for an accompanying check. Any necessary extension of time for response not already requested is hereby requested. Please charge any corresponding fee to Deposit Account No. 02-2666.

Respectfully submitted,

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MARKED-UP SECTION

The following Abstract illustrates the changes requested in the amendment.

A method of notifying clients of a change in a USB including a first client requesting notification of a first change in the USB, detecting the first change in the USB, and notifying the first client requesting notification that the first change in the USB occurred. The first change may be, for example, connection or disconnection of a USB device.

The following claims illustrate the changes requested in the amendment.

1. (Unchanged) A method of notifying clients of a change in a system comprising:
a client requesting notification of the change in the system;
detecting the change in the system; and
notifying the client requesting notification that the change in the system occurred.
2. (Unchanged) The method of claim 1 further comprising:
maintaining a list of requests for notification.
3. (Unchanged) The method of claim 1 further comprising:
the client terminating a request for notification.

4. (Unchanged) The method of claim 2 further comprising:
the client terminating a request for notification;
and removing a request corresponding to the client from the list of requests for notification.

5. (Unchanged) The method of claim 1 wherein:
the change in the system is connection of a device.

6. (Unchanged) The method of claim 1 wherein:
the change in the system is disconnection of a device.

7. (Unchanged) The method of claim 1 wherein:
said requesting includes the client supplying a callback routine; and
said notifying includes executing the callback routine.

8. (Unchanged) A subsystem for notifying clients of a change in a system comprising:
means for a client to request notification of the change in the system;
means for detecting the change in the system; and
means for notifying the client requesting notification that the change in the system occurred.

9. (Unchanged) The subsystem of claim 8 further comprising:
means for maintaining a list of requests for notification.

10. (Unchanged) The subsystem of claim 9 further comprising:
means for the client to terminate a request for notification; and
means for removing a request corresponding to the client from the list of requests
for notification.

11. (Unchanged) The subsystem of claim 10 further comprising:
means for communication to the client; and
wherein:
the client supplies the means for communication; and
the means for communication is utilized by the means for notifying.

12. (Unchanged) A machine-readable medium containing a plurality of
executable instructions, which when executed on a processor cause said processor to
perform a method of notifying clients of a change in a system, the method comprising:
a client requesting notification of the change in the system;
detecting the change in the system; and
notifying the client requesting notification that the change in the system occurred.

13. (Unchanged) The machine-readable medium of claim 12 wherein the
method further comprises:
maintaining a list of requests for notification.

14. (Unchanged) The machine-readable medium of claim 13 wherein the method further comprises:

the client terminating a request for notification;

and removing a request corresponding to the client from the list of requests for notification.

15. (Unchanged) The machine-readable medium of claim 14 wherein:

said requesting includes the client supplying a callback routine; and

said notifying includes executing the callback routine.

16. (Unchanged) A system comprising:

a processor;

a memory;

a bus, the bus coupled to the processor, the bus coupled to the memory; and

the processor processing a request by a client for notification of a change in the system, the processor detecting the change in the system, and the processor notifying the client that the change in the system has occurred.

17. (Unchanged) The system of claim 16 wherein:

the processor maintains a list of requests for notification.

18. (Unchanged) The system of claim 17 wherein:

the processor stores the list of requests in memory.

19. (Unchanged) The system of claim 17 wherein:
the processor processes the client's termination of a request for notification by removing a request corresponding to the client from the list of requests for notification.

20. (Unchanged) The system of claim 19 wherein:
the processor receives a callback routine from the client when the client requests notification and the processor notifies the client by executing the callback routine.

21. (Amended) A method of notifying clients of a change in a Universal Serial Bus (USB) [USB] comprising:
a first client requesting notification of a first change in the USB;
detecting the first change in the USB; and
notifying the first client requesting notification that the first change in the USB occurred.

22. (Unchanged) The method of claim 21 wherein:
the change is connection of a device to the USB;
and further comprising:
finding a driver suitable for use with the device.

23. (Unchanged) The method of claim 21 wherein:
the change is disconnection of a device from the USB;
and further comprising:
deactivating a driver corresponding to the device.

24. (Unchanged) The method of claim 21 further comprising:
a second client requesting notification of a second change in the USB;
detecting the second change in the USB; and
notifying the second client requesting notification that the second change in the
USB occurred.

25. (Unchanged) The method of claim 24 wherein:
a change in the USB constitutes a first change and constitutes a second change.

26. (Unchanged) The method of claim 24 wherein:
a change in the USB that constitutes a first change does not constitute a second
change.